CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A method for virtualizing access to windows, the method comprising the steps of:

    receiving a request relating to a window from a process executing in the context of a user account, the request including a virtual window name;

    determining a literal name for the window using a scope-specific identifier;

    issuing to the operating system a request including the determined literal window name; and

    associating a window handle with the determined virtual window name.

2. The method of claim 1 wherein step (a) comprises the step of intercepting a request relating to a window from a process executing in the context of a user account, the request including a virtual window name.

3. The method of claim 1 wherein step (a) comprises the step of receiving a request to find a window from a process executing in the context of a user account, the request including a virtual window name.

4. The method of claim 1 wherein step (a) comprises the step of receiving a request to create a window from a process executing in the context of a user account, the request including one of a virtual window name.

5. The method of claim 1 wherein step (b) comprises:

   (b-1)   determining a rule associated with the virtual window name included in the request; and

   (b-2)   determining a literal name for the window responsive to the determined rule.

6. The method of claim 1 wherein step (b) comprises determining a literal window name using a scope-specific identifier associated with an application isolation scope with which the process making the request is associated.

7. The method of claim 1 wherein step (d) comprises storing the virtual window name in a mapping table associated with a window handle.

8. The method of claim 1 further comprising the step of receiving from the operating system a response to the issued request.

9. The method of claim 8 further comprising the step of replacing the determined literal window name in the response with one of a virtual window name.

10. A method for virtualizing access to windows, the method comprising the steps of:

    receiving a request to identify one of a virtual window name and a virtual window class identifier, the request received from a process executing in the context of a user account and including a window handle;

    determining that the window handle is associated with the requested one of the virtual window name and the virtual window class identifier; and

    returning to the requesting process the determined window information.

11. The method of claim 10 wherein step (b) comprises determining that no association between the window handle and the requested one of the virtual window name and the virtual window class identifier exists.

12. The method of claim 11 further comprising the step of determining the window handle associated with the requested one of the virtual window name and the virtual window class identifier from a mapping table.

13. The method of claim 12 further comprising the step of returning to the requesting process a response received from the operating system.

14. An apparatus for virtualizing access to windows comprising:

a hooking mechanism receiving a request relating to a window from a process executing in the context of a user account, the request including one of a virtual window name and a virtual window class identifier;

a window name virtualization engine forming one of a literal name for the window and a literal window class identifier using the one of the virtual window name and the

virtual window class identifier received in the request and a scope-specific identifier; and

an operating system interface issuing a request relating to a window, the request including the one of the formed literal name and the formed literal window class identifier for the window.

15.　The apparatus of claim 14 wherein the hooking mechanism intercepts a request selected from a group consisting of finding a window, creating a window, enumerating a window, destroying a window, setting a window name, retrieving a window name, retrieving a window class identifier associated with the window, registering a window class, retrieving information about a window class and unregistering a window class.

16.　 The apparatus of claim 14 further comprising a mapping table storing an association between a window handle and one of the virtual window name and the virtual window class identifier.

17.　The apparatus of claim 16 wherein the mapping table is associated with the process.

18. The apparatus of claim 17 further comprising a second mapping table associated with a second process.

19. The apparatus of claim 15 further comprising a rules engine comprising a rule determining how the window name virtualization engine forms the one of the literal name for the window and the literal window class identifier for the window.

20. A method for virtualizing access to windows, the method comprising the steps of:

    intercepting a request, from a requestor, to paint a title bar for a window, the title bar including the window name, the request including a window handle;

    determining that the window handle is associated with the virtual window name;

    painting the title bar of the window using the virtual window name; and

    indicating to the requestor that the title bar has been painted.

21. A method for virtualizing access to windows, the method comprising the steps of:

receiving a request relating to a window class from a process executing in the context of a user account, the request including a virtual window class identifier;

determining a literal window class identifier using a scope-specific identifier; and

issuing to the operating system a request including the determined literal window class identifier.

22. The method of claim 21 wherein step (a) comprises the step of intercepting a request relating to a window class from a process executing in the context of a user account, the request including a virtual window class identifier.

23. The method of claim 21 wherein step (a) comprises the step of receiving a request to find a window from a process executing in the context of a user account, the request including a virtual window class identifier.

24. The method of claim 21 wherein step (a) comprises the step of receiving a request to create a window from a process executing in the context of a user account, the request including a virtual window class identifier.

25. The method of claim 21 wherein step (b) comprises:

(b-1) determining a rule associated with the virtual window class identifier included in the request; and

(b-2) determining a literal window class identifier responsive to the determined rule.

26. The method of claim 21 wherein step (b) comprises determining a literal window class name using a scope-specific identifier associated with an application isolation scope with which the process making the request is associated.

27. The method of claim 21 wherein step (d) comprises storing the virtual window class identifier in a mapping table associated with a window handle.

28. The method of claim 21 further comprising the step of receiving from the operating system a response to the issued request.

29. The method of claim 28 further comprising the step of replacing the determined literal window class identifier in the response with a virtual window class identifier.